

SEQUENCE LISTING

```
<110> The Board of Regents of the University of Nebraska
<120> IDENTIFICATION OF VIRULENCE DETERMINANTS
<130> UNL 2999.01
<150> US 60/175,433
<151>
       2000-01-11
<160> 6
<170> PatentIn version 3.0
<210> 1
<211> 20
<212> DNA
<213> Artificial/Unknown
<220>
<221> misc_feature
<222> ()..()
<223> Primer
<400> 1
                                                                     20
ggtcagcgca ggcgaagccc
<210> 2
<211> 20
<212> DNA
<213> Artificial/Unknown
<220>
<221> misc_feature
<222>
      ()..()
<223> Primer
<400> 2
                                                                     20
gccaggtcca cactgccccc
<210>
      3
<211> 19
<212> DNA
<213> Mycobacterium smegmatis
<220>
<221> misc_feature
<222>
      (1)..(19)
<223> Transposon
<400> 3
```

Trp Leu Asp Asp Gly Arg Pro 20





- J	-555													
<210><211><212><212><213>	4 19 DNA Mycobact	erium s	megmat	tis										
<220><221><222><222><223>	(1)(19)													
<400> 4 tgcgaagagc ctgttaacg														19
<210><211><212><212><213>														
<400>	5													
Arg Arg	g Thr Gly	Pro Vai	l Gly	Ile	Ser	Ala 10	Val	Ala	Ala	Leu	His 15	Gly		
Trp Ser Asp Ser Gly Gln Pro														
<210><211><212><212><213>	6 23 PRT Mycobact	erium le	eprae											
<400>	6													
Gln Arg	g Thr Ala	Pro Phe	e Gly	Val	Pro	Ala 10	Ala	Asp	Ala	Leu	Arg 15	Gly		



```
<110> The Board of Regents of the University of Nebraska
      IDENTIFICATION OF VIRULENCE DETERMINANTS
<120>
<130> UNL 2999.01
<150> US 60/175,433
<151>
      2000-01-11
<160> 6
<170> PatentIn version 3.0
<210> 1
<211> 20
<212> DNA
<213> Artificial/Unknown
<220>
<221> misc_feature <222> ()..()
<223> Primer
<400> 1
                                                                       20
ggtcagcgca ggcgaagccc
<210> 2
<211> 20
<212> DNA
<213> Artificial/Unknown
<220>
<221> misc_feature
<222> ()..()
<223> Primer
<400> 2
gccaggtcca cactgccccc
                                                                       20
<210> 3
<211> 19
<212> DNA
<213> Mycobacterium smegmatis
<220>
<221> misc_feature
<222>
      (1)..(19)
<223> Transposon
<400> 3
```

Trp Leu Asp Asp Gly Arg Pro 20

L. .

```
<210>
      4
<211>
      19
<212> DNA
<213> Mycobacterium smegmatis
<220>
<221> misc_feature
<222> (1)..(19)
<223> Transposon
<400> 4
                                                                     19
tgcgaagagc ctgttaacg
<210>
      5
<211> 23
<212> PRT
<213> Mycobacterium paratuberculosis
<400> 5
Arg Arg Thr Gly Pro Val Gly Ile Ser Ala Val Ala Ala Leu His Gly
Trp Ser Asp Ser Gly Gln Pro
           20
<210> 6
<211> 23
<212> PRT
<213> Mycobacterium leprae
<400> 6
Gln Arg Thr Ala Pro Phe Gly Val Pro Ala Ala Asp Ala Leu Arg Gly
```